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ECONOMIC GROWTH AND INNOVATION

Manitoba's Demographic Challenge: Why Improving Aboriginal Education Outcomes Is Vital for Economic Prosperity

By
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- As a wave of babyboomers retire, the upcoming decade will see only a modest expansion in Manitoba's available workforce, and most of this net increase will depend on job-seeking young Aboriginals.
- Policy reforms should encourage more Aboriginal students to finish high school. Smart reforms to financial aid for postsecondary education would demonstrate aid availability to students early in their academic careers. This would bolster student educational aspirations during secondary studies for those on the margins of accessing postsecondary education.
- With large numbers of Aboriginal high-school dropouts, Manitoba cannot, and should not, rely solely on expanding international immigration to boost workforce growth.

Having avoided the worst of the recent recession's trouble with a modest 0.2 percent decline in provincial GDP for 2009, Manitoba now faces its next big challenge: how to prepare for an aging labour force? A wave of babyboomers is set to retire, raising the question of who will replace their contribution to the economy. Without improving the education outcomes among Manitoba's Aboriginal youth – a significant share of the population – the province will be limited in its ability to offset the effects of the boomers' departure from the workforce.

Among Canadian provinces, Manitoba is matched by Saskatchewan in having the largest Aboriginal population share: 15 percent in the 2006 Census. Unfortunately, Manitoba also has the worst gap between Aboriginal and Non-Aboriginal education outcomes. There is a well-known divergence across Canada in high-school, college and university outcomes for these two demographic groups (Richards 2009).[1] And at both the low and high ends of educational attainment – from high-school completion rates to university graduation – the gap between Non-Aboriginals and Aboriginal Manitobans has grown from one generation to the next (Figure 1).

The 2006 Census results show that among Manitobans between ages 20 and 34, around 46 percent of young Aboriginal males and 39 percent of females have not finished high school. Both rates are significantly worse than those for Non-Aboriginals: 16 percent of Non-Aboriginal males and 11 percent of Non-Aboriginal females of the same age have not completed high school. Low high-school completion rates are a problem, because people with little education often struggle more to find work – even at lower wages – than their more educated counterparts.[2]

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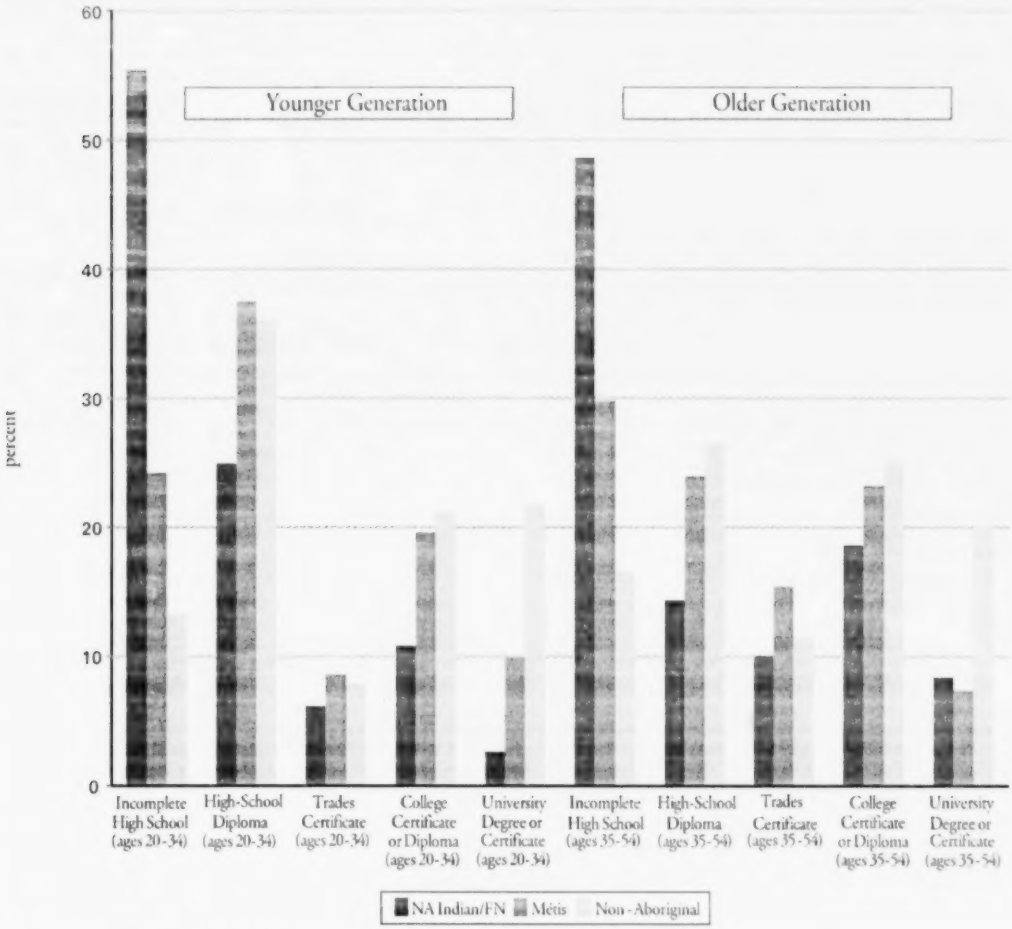
1 While Manitoba's Aboriginal population is composed of many diverse groups, including Metis and North American Indian/First Nation populations, unless otherwise stated the term Aboriginal used in this paper corresponds to those who self-identify as Aboriginals during the enumeration of the Census.

2 The social and economic pressures on Aboriginal Manitobans result in further fiscal costs that arise from a higher usage rate of public services, such a public housing, child care services, healthcare, etc. (RCAP 1996, Sharpe and Arsenault 2010).

Figure 1: Manitoba's Growing Divergence in Educational Outcomes: Non-Aboriginal and Aboriginal Populations



Sources: Census 2006 and author's calculations.

Note: According to the Census, individuals can self-identify as belonging to North American (NA) Indian or First Nations (FN), Métis, or Arctic Inuit groups. See the appendix in Richards (2008) for more on this subject.

Manitoba's population will age dramatically over the next 20 years, and its workforce will expand more slowly than in the past. These pressures necessitate examining the effect of education and labour market results on public finances. What is the solution? This paper argues that provincial policies aimed at improving Aboriginal educational outcomes hold more promise than relying on increased immigration to boost workforce growth.

Projecting Manitoba's Coming Demographic Shift

To project future population for Manitoba, the starting point is the 2006 Census. With its results as a base,[3] I make projections using straightforward assumptions for the birth rate and longevity of the Aboriginal and Non-Aboriginal populations (see Box 1).

3 I also reconciled the figures with inter-Census results for migration.

Box 1: Charting a Demographic Future for Manitoba

As with all demographic projections, the challenge is to find the most plausible assumptions for the future. I use 2006 Census data and previous literature on Aboriginal demographics in Canada – taking into account the diverse composition of the Aboriginal population in Manitoba – to determine the life expectancies for Non-Aboriginals and Aboriginals.* I also reconcile fertility rate data with recent birth figures to determine the average number of births per woman. I further assume:

- the total fertility rate remains constant over the projection period;
- Life expectancy at birth rises similar to Statistics Canada's "medium" case scenario.

From here, I make assumptions for interprovincial and international migration (see Table A for a complete list of assumptions). In terms of flows between provinces, Manitoba's past record is one of persistently high net outmigration: only 2 of the last 37 years saw positive net interprovincial migration.

- For the baseline immigration scenario, I project the recent 10-year average of interprovincial outmigration, by age and sex, to gradually approach zero over a 30-year period.
- For the high immigration scenario, I project interprovincial outmigration becomes zero in 15 years' time.

Information on the interprovincial movement of the Aboriginal community is scarce, but because recent reports find a trivial level of net Aboriginal outmigration from Manitoba (Manitoba 2005), I assume no migration changes over the projection period.

Since 1998, Manitoba has seen a gradual expansion of total international immigration levels through an expanded Provincial Nominee Program, which attempts to accelerate immigration applications by allowing provinces to nominate potential immigrants who are interested in settling in a specific province. In 2006, immigration levels rose to 10,995 people – about three times more than a decade ago – with 70 percent of arrivals coming through the PNP stream.

- For the baseline immigration scenario I take the latest 10-year average of net immigration, by age group and sex, and hold this level constant over the projection period.
- For the high immigration scenario, I allow Manitoba to remain on an increasing rate of of international in-migration, where total levels rise to 15,000 per year in 2016.**

Notes:

* The demographic results do not estimate for the impact of a changing level of ethnic affiliation – commonly referred to as ethnic mobility, or ethnic drift. The author notes the potential impact that this may have on the demographic results.

** The Manitoba government has set an aggressive target to increase immigration by 1,000 persons each year until it reaches 20,000 persons per year in 2016.

Table A: Assumptions for Non-Aboriginal and Aboriginal Populations, 1999-2059

		1999	2009[a]	2019	2029	2039 *(estimates)*	2049	2059
Assumptions								
Life Expectancy at Birth (years)								
Non-Aboriginal	Male	75.9	76.9	78.3	79.3	80.3	81.3	82.3
	Female	81.8	82.7	83.8	84.8	85.8	86.8	87.5
Aboriginal	Male	70.0	71.9	73.6	75.2	76.4	77.4	78.3
	Female	76.5	77.3	79.0	80.5	81.5	82.5	83.4
Total Fertility Rate								
Non-Aboriginal		1.75	1.85	1.85	1.85	1.85	1.85	1.85
Aboriginal		2.75	2.55	2.55	2.55	2.55	2.55	2.55
Net International Migration (persons)		2,068	9,860					
Baseline Immigration Scenario				6,212	6,212	6,212	6,212	6,212
High Immigration Scenario				15,000	15,000	15,000	15,000	15,000
Net Interprovincial Migration (persons)		-2,785	-3,019					
Baseline Immigration Scenario				-2,243	-855	-178	0	0
High Immigration Scenario				-1,345	0	0	0	0

[a] Estimates based on Census 2006 and more recent Inter-Census data to create 2009 results. Bélanger and Malenfant (2005).

Sources: Author's calculations; Census 2006.

I simulate two migration scenarios:

1) a baseline immigration scenario, which continues the most recent 10-year average levels of international immigration, by age and sex, and assumes a future period of declining interprovincial outmigration over the next three decades;

2) a high immigration scenario, which assumes rising international immigration levels and a sharp reduction in future interprovincial outmigration.

The Results: Aboriginals Are the Source of Most New Additions to Manitoba's Future Workforce

In the baseline immigration scenario, the upcoming decade will see Manitoba's available workforce – the population aged 18-64 – expand by 26,000 persons. Nearly all of this net workforce increase will come from young Aboriginals who enter the pool of potential workers as older Non-Aboriginals retire (see Appendix A for results). Even in the high immigration scenario, Aboriginals represent about one in three new net additions to the available workforce over the next 10 years.

Demographically Sensitive Spending

To demonstrate the effect of an aging population on the public costs of Manitoba's demographically sensitive programs – like health, education, and seniors' programs – I take demographic estimates and available cost data and make simple assumptions for future economic growth and price trends.[4]

For economic growth, I project past rates of productivity growth to continue at historical averages for both populations.[5] Labour-force participation rates are assumed to grow in line with trends for each population cohort, by age and sex,[6] as are unemployment rates.[7] I also project hours worked and the full- or part-time shares of employment, by age group and sex, to remain at 2009 levels in the future.

To estimate the changing costs of demographically sensitive programs, I assume the following:

- Historical per capita education costs – for ages 5 to 17 (primary and secondary) and 18 to 24 (postsecondary) – and health costs by age-group and sex are applied to the demographic estimates, assuming health and education service intensity rise, with historical productivity growth, 1.3 percent.[8]
- Public-service spending continues to rise at the average annual pace recorded by the price index of provincial government consumption from 1991 to 2008 – 2.3 percent.[9]

As a final step, I simulate the economic effects of a convergence of educational outcomes for Aboriginals to Non-Aboriginal levels over a 15-year period. To do so, I let Aboriginal productivity, participation and unemployment rates approach those of Non-Aboriginals.

4 The methodology here borrows extensively from Guillemette and Robson (2007).

5 I assume that real GDP per hour worked will grow by the 1993 to 2008 average, 1.3 percent, and that each population base contributes a different level of productivity. As a crude measure of the difference in productivity among populations, the 2006 Census found a median income of $15,200 for Aboriginals and $25,500 for Non-Aboriginals. GDP prices are assumed to increase at 2 percent annually.

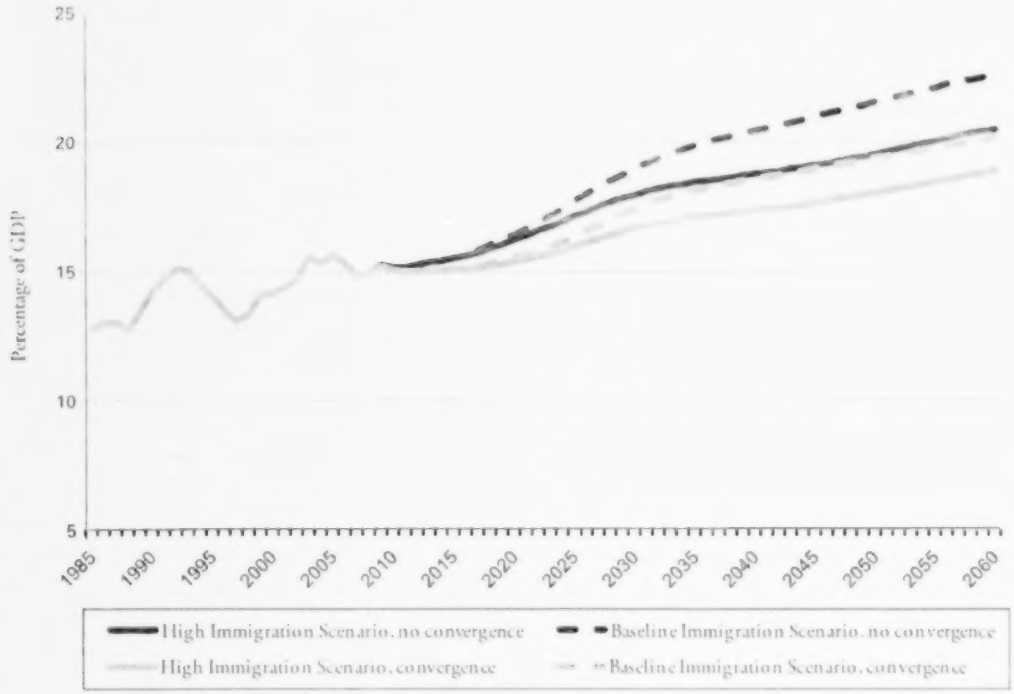
6 Drawing from aggregate figures in the 2006 Census, the average participation rate gap of Non-Aboriginal to Aboriginal populations is set at 10 percentage points in each age group; for unemployment rates, the gap is set at 11 percentage points.

7 Over the medium- to long-term, aggregate unemployment rates reach 4.1 percent for the Non-Aboriginal population and 15.5 percent for the Aboriginal population.

8 Per capita health costs come from CIHI (2008); primary and secondary education costs come from Brockington (2009); postsecondary costs come from CANSIM.

9 I also let the costs of old-age programs, like Manitoba's 55+ income supplement and the shelter benefit program grow with the projected growth rate for federal Old-Age Security costs (see OCA 2008).

Figure 2: Manitoba's Demographically Sensitive Program Spending: With and Without Convergence in Outcomes Between Non-Aboriginal and Aboriginal Populations, 1985 to 2060



Source: Author's calculations as described in text.

The Results: Higher Future Health and Education Costs

From 2009 to 2035, as boomers begin to draw more heavily on public health services, healthcare costs are projected to rise from 8.8 to 12.5 percent of the provincial economy, in the baseline scenario and without improvements in Aboriginal educational outcomes. For the same scenario, education costs are projected to rise modestly from 6.2 to 7.2 percent of the economy over the upcoming 25-year period. How best to address these fiscal challenges?

In the most optimistic scenario, a convergence of Aboriginal and Non-Aboriginal educational outcomes would boost economic growth, and reduce the percentage of provincial income spent on demographically sensitive programs perhaps more so than any other singular policy outcome, including higher immigration (Figure 2). Improving the educational outcomes of the Aboriginal population would increase the skill level of workers, boosting labour market productivity and economic growth. Higher education levels also lead to improved socio-economic conditions, thus reducing usage rates of healthcare services. The overall effect is to dampen rising costs from aging as a proportion of the future economy. Manitoba therefore cannot, and should not, rely solely on expanding international immigration, if that means it avoids addressing its underlying social issues.

Implications – What can the Provincial Government Do?

Manitoba needs to enact innovative policies to improve the poor educational outcomes of Aboriginal students, particularly the persistently elevated rate of high-school dropouts. Although some responsibility for delivering educational performance rests with the delivery of on-reserve education – the task of band councils and Ottawa – most Aboriginals in Manitoba attend provincially funded schools. Some initiatives hold promise; for example, the province could:

- Enable school districts to undertake discretionary Aboriginal education initiatives;
- Encourage and enable Aboriginal organizations and individuals to participate meaningfully in school governance;
- Regularly measure, and publish, results for Aboriginal student performance (Richards 2009).[10]

But better high-school completion rates alone are just a start. As the skill requirements in the workforce grow, the prospects for a good standard of living in many cases require some form of postsecondary education. Improving postsecondary educational access is, however, complex, with both financial and non-financial challenges. Non-financial factors that affect Aboriginal participation in postsecondary education include high-school performance, parental education, relocation to urban centres, family responsibilities, age, on-campus racism, and peer influences (Mendelson 2006, Malatest 2002).[11]

To financially support students, Ottawa and the provinces offer a mixture of loans, grants, tax credits and loan remission payments. In Manitoba, the level of total non-repayable aid, in the form of grants and remission payments,[12] is the highest among the provinces (Berger and Baldwin 2009).[13] Although often cited as a reason for preventing the access and completion of postsecondary studies, an accumulation of empirical studies find that financial factors explain a surprisingly small amount of the difference between the participation of poor and rich students in Canada (Frenette 2007, Corak et al. 2003). Though the Manitoba government's stance on fixed, low tuition fees has relaxed recently and tuition costs are increasing modestly, arguably too much of the policy direction and public debate in Manitoba has centered on this element and not enough on real solutions (Levin 2009). For both low-income groups and Aboriginals, the primary challenge appears to be finding ways to raise educational expectations during secondary school years (Finnie et al. 2009) – a complicated task.

The primary goal of policy reforms should be to encourage more students to finish high school. And while Canadians await clearer answers about what influences the expectations and behaviours of high-school students, smart reforms to financial aid delivery would demonstrate aid availability to students early on in their academic careers, showing them potential future access to both grants and loans well before they apply to a postsecondary institution. This would bolster student educational expectations and aspirations during secondary studies for those on the margins of accessing postsecondary education, and help families plan for the financial challenges of pursuing higher education (Berger and Baldwin 2009).

Conclusion

Manitoba's steady-as-it-goes economy should not lull policymakers into accepting the status quo – demographic changes will arrive in force in the coming decades. Improving the educational outcomes of Aboriginal Manitobans will require cooperation among all affected parties – bands, government, college and university administrators, and business leaders. The positive and resilient attitudes that bind these partnerships will have important implications for Manitoba's future economic prosperity – and real progress will require an aggressive strategy.

10 Notable yet expensive initiatives to change the aspirations of high-school students include the Career Trek program, Pathways to Education Canada, the AVID model (currently being tested in British Columbia), among others.

11 Policy initiatives along these lines include the ACCESS program, the student services offered at the University of Manitoba's Aboriginal House and the creation of University College of the North, to name a few.

12 It is worth noting that the federal Post-Secondary Student Support Program, which is intended to cover the costs of tuition, books, and travel and living expenses, extends financial support only to status Indians; non-status Indians and Métis students, however, do not have access to this program (Usher 2009).

13 Targeted examples along these lines include the grants available from the Aboriginal Bursary System and the Manitoba Business Council's Aboriginal Awards Program.

Key Demographic Results, 1999 to 2059

	1999	2009[a]	2019	2029	2039 (estimates)	2049	2059
Results							
Baseline Immigration Scenario							
Population (000s)							
Total	1,142	1,212	1,303	1,404	1,498	1,593	1,691
Non-Aboriginal	986	1,022	1,079	1,145	1,208	1,271	1,337
Aboriginal	156	190	224	259	290	322	355
Working-age Population (000s)							
Total	696	764	790	797	855	908	952
Non-Aboriginal	600	653	654	646	686	720	753
Aboriginal	96	112	136	150	169	188	199
School-age Population (000s)							
Total	215	206	214	237	238	256	275
Non-Aboriginal	166	155	164	179	178	191	203
Aboriginal	49	51	50	58	61	64	72
Old-Age Dependency (65+ / 18-64) (%)							
Total	22.4	21.6	26.9	35.8	36.7	36.3	38.0
Youth Dependency (0-17 / 18-64) (%)							
Total	41.7	36.9	37.9	40.4	38.6	39.2	39.7
Aboriginal Share Population	13.7	15.7	17.2	18.4	19.3	20.2	21.0
Aboriginal Share Workforce Pop.	13.8	14.6	17.2	18.9	19.7	20.7	20.9
Aboriginal Share School-age Pop.	22.8	24.9	23.4	24.4	25.5	25.2	26.3
High Immigration Scenario							
Population (000s)							
Total	1,142	1,212	1,392	1,614	1,839	2,072	2,314
Non-Aboriginal	986	1,022	1,168	1,356	1,549	1,750	1,959
Aboriginal	156	190	224	259	290	322	355
Working-age Population (000s)							
Total	696	764	848	939	1,086	1,221	1,343
Non-Aboriginal	600	653	712	789	917	1,034	1,144
Aboriginal	96	112	136	150	169	188	199
School-age Population (000s)							
Total	215	206	236	284	308	348	387
Non-Aboriginal	166	155	186	227	247	283	315
Aboriginal	49	51	50	58	61	64	72
Old-Age Dependency (65+ / 18-64) (%)							
Total	22.4	21.6	25.2	30.7	30.1	30.3	32.8
Youth Dependency (0-17 / 18-64) (%)							
Total	41.7	36.9	39.0	41.2	39.2	39.4	39.5
Aboriginal Share Population	13.7	15.7	16.1	16.0	15.8	15.5	15.3
Aboriginal Share Workforce Pop.	13.8	14.6	16.0	16.0	15.5	15.4	14.8
Aboriginal Share School-age Pop.	22.8	24.9	21.1	20.3	19.8	18.5	18.7

[a] Estimates based on Census 2006 and more recent Inter-Census data to create 2009 results. Bélanger and Malenfant (2005).

Sources: Author's calculations; Census 2006.

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